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EXAMINER
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HOSSAIN, FARZANA E

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2623

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to communications filed 05/21/2008. Claims 1, 15, 17 and 19 are amended. Claims 2, 9, 14, 16, 18, 24, 27, 28, 37, 39-71 are cancelled. Claims 3-8, 10-13, 20-23, 25, 26, 29-36 and 38 have been previously presented.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 15, 17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Claims 1, 15, 17 and 19, the applicant argues that Abecassis and Kwoh cannot be combined (Page 11). The applicant argues that it would be redundant to combine Abecassis and Kwoh because elements would already be decoded (Page 14). The applicant argues that the examiner cited Column 13 in Kwoh for this information but believes citing for Figures 23, 24, 25. The applicant argues that Kwoh discloses when a user's preferences are not met; the system is unable to display video and instead displays a blue screen with text (Page 13). The applicant argues that combining the in stream decoding of tags and text in Kwoh to Abecassis would render a system that would not operate as the Abecassis reference was intended to operate so there is no reason to combine (Page 13). The applicant argues Kwoh does not meet

limitations alone (Page 13). The applicant argues that even if some designer would combine the tags and text of Kwoh with Abecassis than the combined system would have redundant aspects since content map would already contain tags and markers that are decoded from the system (Page 14). The applicant also argues that the user can create or modify their unique program segment map (Page 14). The applicant argues there is no storage unit and buffer storing microseconds of video data is not a video storage (Page 15). The applicant argues that Abecassis discloses a video player that is capable of accessing a content map to skip over segments (Page 11) and requires the content map to be available at play time and the invention would not work with the map (Page 12). The applicant argues that there is no reason to combine.

In response to the argument, Abecassis discloses a video stream comprising video program segments (Column 6, lines 28-39, Column 13, lines 46-67, Column 14, lines 1-14) and a continuous series of video segments (Column 8, lines 53-63). Abecassis discloses numerous ways for a user to watch a program including selecting the program and downloading program and map are downloaded together (Column 14, lines 10-14, 65-67, Column 15, lines 1-8). Abecassis discloses that a program content map includes detailed information as to location and program characteristics such as categories and subject matter (Column 5, lines 13-20). Abecassis allows a user to create his or her own segment map as one of the aspects of the invention; however, this is not the section the examiner pointed to the Abecassis reference in which a program had classification codes and keywords describing the program (Column 7, lines 8-25, Column 8, lines 39-52). Abecassis discloses the program is downloaded (Column 14,

lines 11-14, Column 10, lines 35-50, Figure 5, 611, 612) and that video buffers are storing content; also the buffers are retrieving video information from the disk (Column 10, lines 34-50) and the program is being provided to viewer onto hard formats including tape, laser disk or memory (Column 13, lines 46-55, Column 14, lines 3-14). Therefore, there is a storage unit.

Kwoh is analogous to Abecassis. Abecassis discloses program map transmitted with the program and storing the map separately. Abecassis discloses the STB separates markers encoded within the video stream (Column 8, lines 39-45, Figure 5, 633); the STB separates tags encoded within the video stream (Figures 1A-1C, Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-52, Column 6, lines 44-55, Column 5, lines 17-20). Although, the applicant argues that it would be illogical to combine because Abecassis has a program content map with decoded tags and markers; the Examiner specifically addressed in the office action that Abecassis does not explicitly disclose the STB decoding the markers and tags from the program. The examiner pointed to Kwoh on Page 7 of the Office Action to (Figure 25, 706, 708) for a decoder which decodes the tags and markers from the video stream. Kwoh therefore is used to explicitly disclose a decoder. Also, Kwoh discloses storing a program on a video storage unit (Column 18, lines 46-67).

Furthermore, in *KSR International Co. v. Teleflex Inc.*, the Court found that the claim would have been obvious because the substitution of one known element for another would have yield predictable results to one of ordinary skill in the art at the time of the invention. Therefore, Abecassis's STB separating tags and markers which

includes an element which necessarily separates the content is substituted by the explicitly disclosed Kwoh's decoder to decode the tags and markers. See above.

The argument that the invention would have redundant aspects is not persuasive. Kwoh is combined with Abecassis to explicitly disclose decoding the tags and markers otherwise the applicant is arguing that Abecassis discloses all elements of the claim. The Kwoh reference is used for the substitution of one element.

The argument that the lack of a content map in Abecassis would simply have a program that halts is not persuasive and is irrelevant to the current claims. Abecassis discloses tags and markers. Kwoh discloses tags and markers (Figure 23 and Figure 24). The applicant is making an assumption that the Abecassis would not operate properly simply from the lack of a content map. If a program content map is not available, then a program would play in its entirety without any mapping to the preference of a viewer (Column 1, lines 50-60). Kwoh discloses one aspect of its inventions which does not play a segment or excludes a segment because of preference (Column 16, lines 7-30). This is not the same as having no program content map and halting in displaying a program as assumed by the applicant. Abecassis discloses skipping segments based on preferences (Figures 1A-1C). Moreover, in a second *KSR* rationale, the Court found that the claim would have been obvious in the prior art and one skilled in the art could have been combined as claimed by known methods with no change in their respective functions, and the combination would have yielded predicated results to one of ordinary skill in the art at the time of the invention. Kwoh is combined specifically for decoding tags and markers (Figure 25).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is to allow children to watch scrambled programs based on parental guidance (Column 1, lines 60-67, Column 1, lines 1-2) as disclosed by Kwoh and to provide data to a user to block programming that is not allowed to every viewer and deciphering the data in a usable fashion.

3. All other dependent claims depend on the independent claims and no argument was made to any specific dependent claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5-8, 10-13, 15, 17, 19-23, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis (US 6,011,895) in view of Kwoh et al (US 6,226,793 and hereafter referred to as "Kwoh").

Regarding Claims 1, 15, 17 and 19, Abecassis discloses a method of selecting preferred video segments from a plurality of video segments within a video stream, a system of selecting preferred video segments from a continuous series of video segments within a video stream (Column 7, lines 16-26, Figure 1, Figure 3, Figure 5), the method and system comprising: a set top box (STB) that receives the video stream, the video stream comprising a continuous series of video segments or sequential series of segments of a program to play to the viewer (Figure 3, Column 8, lines 62-64); the STB separates markers encoded within the video stream, the markers indicating divisions or beginning and ending frames between the plurality of video segments of the video stream (Column 8, lines 39-45); the STB separates tags encoded within the video stream, each video segment having associated tags, the tags provide information relating to the content of an associated video segment (Figures 1A-1C, Column 7, lines 8-15, 28-67, Column 8, lines 1-26, 39-52, Column 6, lines 44-55, Column 5, lines 17-20); a video segment database or a database storing the markers and tags separated from the video stream (Figure 5, 623, 622, 633, Column 5, lines 17-20); a video storage storing the plurality of video segments, the plurality of video segments identified from the video stream using the markers (Figure 5, 611, 612, Column 11, lines 15-30, 59-65); a user preference database, the user preference database storing viewer preferences from a viewer (Figure 5, 651, Column 10, lines 57-65, Figure 1, Column 7, lines 8-15); a



comparator compares the tags from the database with viewer preferences to select preferred video segments from the video storage and using video preference information of a viewer to select preferred video segments from the video storage by comparing the tags describing the content of each video segment stored in the database with the video preference information of the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52, Column 14, lines 10-13, Column 15, lines 52-57, Figures 1A-C, Figure) and downloading preferred video segments from the video content from the local storage for viewing by the viewer if the comparison of the tags of each video segment with the video preference information is favorable (Column 11, lines 1-15). Abecassis does not explicitly disclose a decoder decoding the tags and markers.

In analogous art, Kwoh discloses a method of selecting preferred video segments and excluding unwanted video segments from a plurality of video segments within a video stream (Figure 26) comprising: encoding markers within the video stream (Column 13, lines 33-64, Figure 23, 664, 668 Figure 24, 684, 688, 693, 694), the markers having a position in the video stream that indicates a division between the plurality of video segments of the video stream (Figure 23, 664, 668, Figure 24, 684, 688, 693, 694); encoding tags within the video stream that indicate content of each video segment (Column 13, lines 33-64, Figure 21); receiving a video stream, the video stream comprising a continuous series of video segments (Figures 23 and 24); using video preference information of the viewer to select the preferred video segments and exclude the unwanted video segments by comparing the tags with the video preference

information of the viewer (Figure 26). Kwoh discloses that step of encoding tags and markers within the video stream comprise encoding tags and markers manually by a use of computer (Figure 20, 10007). Kwoh discloses a video blanking interval decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Abecassis to include decoder that decodes the tags and makers from the regular video stream (Figure 25, 706, 708) as taught by Kwoh in order to provide parental control on all broadcasts and transmissions to a STB (Column 1, lines 14-16, 55-57) as disclosed by Kwoh.

Regarding Claim 3, Abecassis and Kwoh disclose all the limitations of Claim 1. Kwoh discloses encoding tags and markers within the video stream manually by a use of computer (Figure 20, 10007).

Regarding Claim 5, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses that the markers within the video stream are encoded with markers video stream based upon detection of changes of scenes (Figure 3A).

Regarding Claim 6, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses using video preference information of the viewer to select preferred video segments within a video stream comprises comparing key words are input by the viewer with the tags that have been placed within the video stream (Column 7, lines 8-26, Column 8, lines 38-45).

Regarding Claim 7 and 23, Abecassis and Kwoh disclose all the limitations of Claims 1 and 19 respectively. Abecassis discloses that encoding tags within the video

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steam such as the topic (Column 7, lines 8-26). Kwoh discloses placing the information from an EPG into the video stream relating to the video segment (Column 14, lines 46-67, Column 15, lines 1-21).

Regarding Claim 8, Abecassis and Kwoh disclose all the limitations of Claim 1. Kwoh discloses the tags and markers are encoded in the vertical blanking interval (Column 13, lines 50-55, Column 14, lines 66-67, Column 15, lines 1-9).

Regarding Claim 10, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses that skipping to a next video segment upon receiving an input control signal from a user input device (Column 7, lines 8-26, Column 5, lines 24-36, Column 11, line 35) and proceeding to a selected video segment (Column 7, lines 8-26, Column 5, lines 24-36).

Regarding Claim 11, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses that excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Column 10, lines 10-16, Column 5, lines 5-12, Column 7, lines 8-26, Column 8, lines 39-52). Kwoh discloses excluding the video segments that do not have tags that match any preferred content tags in the video preference information of the viewer (Figures 23 and 24).

Regarding Claim 12, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses excluding the video segments that match undesired content tags in the video preference information of the viewer (Column 7, lines 20-23, Column 10, lines 10-16).

Regarding Claim 13, Abecassis and Kwoh disclose all the limitations of Claim 1. Abecassis discloses using video preference information of a viewer to select preferred video segments from the video storage comprising sequentially accessing preferences and tags stored in the database or accessing sequentially tags and markers based on the scenes or segments (Column 11, lines 15-30).

Regarding Claim 20, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis discloses a personal video recorder for filtering the video stream based on a viewer's habits and preferences to provide video segments to be viewed by the viewer (Figure 5, 601, 631, 612, Column 10, lines 33-67, Column 11, lines 1-30).

Regarding Claim 21, Abecassis and Kwoh disclose all the limitations of Claim 19. Kwoh discloses a video blanking interval decoder that separates the tags and makers from the regular video stream (Figure 25, 706, 708).

Regarding Claim 22, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis discloses a comparator sequentially accesses the tags and the markers in the video segment database or sequentially access scenes for tags and markers in the video segment database (Column 11, lines 15-30)

Regarding Claim 36, Abecassis and Kwoh disclose all the limitations of Claim 19. See rejection of claim 3. Kwoh discloses that the plurality of video segments in the video stream comprise a live broadcast signal that is sent to the STB at a viewer's premises (Column 13, lines 33-64).

Regarding Claim 38, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis discloses a viewer personalized remote control or input device (Figure 5,

655, 656, 657) that transmits the video preference information to the system (Figure 5, 651).

6. Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 1 above, and further in view of Maybury et al (US 6,961,954 and hereafter referred to as "Maybury").

Regarding Claims 4 and 33, Abecassis and Kwoh disclose all the limitations of Claims 1 and 19 respectively. Abecassis and Kwoh are silent on encoding tags and markers comprise encoding tags and markers automatically by use of voice recognition techniques. Maybury discloses encoding markers within a video stream (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) which indicates a division between a plurality of segments (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags comprising keywords (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67). Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination to include encoding markers (Column 9, lines 42-67, Column 10, lines 1-21, 34-48) by using voice recognition (Column 10, lines 33-40) and encoding tags (Column 16, lines 48-56) by using voice recognition (Column 18, lines 38-67) as taught by Maybury in order to provide a more efficient tool of allowing a user to catalog and search multimedia information which is more accurate (Column 1, lines 54-67) as disclosed by Maybury.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 19 above, and further in view of Eyer (US 6,483,547).

Regarding Claim 25, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis and Kwoh are silent on the tags and markers being analog. Eyer discloses that the tags and markers are encoded as analog data in the video stream to generate the encoded video stream (Figure 1, 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as analog data to generate the encoded video stream (Figure 1, 16) as taught by Eyer in order to use identification data to access information about the program (Column 2, lines 29-41) as disclosed by Eyer.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 19 above, and further in view of Beckman et al (US 6,675,388 and hereafter referred to as "Beckman").

Regarding Claim 26, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis and Kwoh are silent on the tags and markers being digital. Beckman discloses that the tags and markers are encoded as digital data or that digital data is inserted into the VBI in the video stream to generate the encoded video stream (Column 4, lines 33-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers as digital data to generate the encoded video stream (Column 4, lines 33-35)

as taught by Beckman in order to coordinate distribution of digital and analog broadcasts to receivers (Column 2, lines 1-11) as disclosed by Beckman.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 19 above, and further in view of Elenbaas et al (US 2005/0028194 and hereafter referred to as "Elenbaas").

Regarding Claim 29, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis and Kwoh are silent on encoding tags and markers detecting changes in flesh tone. Elenbaas discloses detecting changes in flesh tone for image analyze of important scenes or story segments (Page 4, paragraph 0028). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode tags and markers by detecting changes in flesh tone (Page 4, paragraph 0028) as taught by Elenbaas in order to improve search and retrieve techniques for interest in television program (Page 1, paragraph 0008) as disclosed by Elenbaas.

10. Claims 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 19 above, and further in view of Ahmad et al (US 6,880,171 and hereafter referred to as "Ahmad").

Regarding Claims 30 and 34, Abecassis and Kwoh disclose all the limitations of Claim 19. Kwoh discloses insertion of markers for diversion between video segments (Figures 23 and 24). Abecassis and Kwoh are silent on encoding tags and markers detecting changes in audio including music within the video stream. Ahmad discloses

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detecting changes in audio levels including music (Column 25, lines 17-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to encode markers by detecting changes in audio levels including music (Column 5, lines 17-25) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.

Regarding Claim 32, Abecassis and Kwoh disclose all the limitations of Claim 19. Kwoh discloses insertion of markers for diversion between video segments (Figures 23 and 24). Abecassis and Kwoh are silent on markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream. Ahmad discloses that markers inserted to indicate the division between the video segments and tags inserted to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments to indicate content by automatic detection of changes in color within the video stream (Column 16, lines 37-53) as taught by Ahmad in order to categorize and organize segments of information (Column 1, lines 39-62) as disclosed by Ahmad.



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11. Claims 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abecassis in view of Kwoh as applied to claim 19 above, and further in view of Gove (5,099,322).

Regarding Claim 31, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis and Kwoh are silent on the video stream being encoded based on detection of changes in light levels. Gove discloses that each video segment is defined by automatic detection of changes in light level within the video stream (Column 3, lines 1-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments and insert tags to indicate content by automatic detection of changes in light levels within the video stream (Column 3, lines 1-16) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

Regarding Claim 35, Abecassis and Kwoh disclose all the limitations of Claim 19. Abecassis and Kwoh are silent on the video stream being encoded based on detection of scene changes. Gove discloses that each video segment is defined by automatic detection of changes in scenery (Column 3, lines 13-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to insert markers to indicate the division between the video segments is defined by automatic detection of changes in scenery (Column 3, lines 13-21) as taught by Gove in order to analyze the scene changes in a video signal (Column 1, lines 65-68) as disclosed by Gove.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARZANA E. HOSSAIN whose telephone number is (571)272-5943. The examiner can normally be reached on Monday to Friday 7:30 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Chris Kelley/  
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Unit 2623

FEH  
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